GE Service Manual

IC755CSW07CDA

1. Description

The IC755CSW07CDA is a QuickPanel+ Operator terminal. It is part of the Visualization product catalog that is manufactured by Emerson Automation, formerly by GE Intelligent Platforms (GE IP). It functions as a Human Machine Interface (HMI), featuring an embedded display measuring 7-inch widescreen TFT LCD screen with resolution of 800 x 480 pixels. It comes with a projected capacitive, multi-touch interface and an Intel Freescale i.MX535 1 GHz ARM Cortex A8 processor. The integrated memory avail

2. Specifications

Specification	Value
Manufacturer	**GE Fanuc Emerson**
Product	**Type Operator Terminals**
Product	**Line Quickpanel**
Part	**Number IC755CSW07CDA**
Weight	**1.69 lbs (0.77 kg)**
Description	**Operator Interface Terminal**
Voltage	**24 Volts DC**
Screen	**Size 7 inches**
Processor	**Freescale i.MX535 1GHz based on ARM Cortex A8**
Resolution	**800 x 480 pixels**
Display	**Size 7 inches**
Clock	**Speed 1GHz**
Screen	**Type TFT widescreen**
Display	**Resolution 800 x 840 SVGA**
Display	**type Colored TFT Display**
Serial	**Ports RS-232, Ethernet port**
USB	**Ports USB Host: Two (2) USB 2.0 (Type-A) USB Device: USB 2.0 (Mini Type-B)**
Operator	**Input Multi-touch**
Input	**Type Touch**
Power	**Consumption 15 watts**
Integral	**Memory 512 MB SDRAM; 256 MB SLC NAND FLASH; 512 KB Battery Backed SDRAM**
Terminal	**memory 512 GB DDR2 SDRAM; 256 MB SLC NAND Flash; 512 KB SRAM**
Temperature	**0-55 degrees Celsius**
Communication	**Interface One (1) Ethernet interface; One (1) RS485;**
Communication	**ports One (1) Ethernet; One (1) RS232**
Two	**(2) Ethernet; One (1) RS232 UART One (1) RS323 / RS485 Removable storage**

3. Product Information

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Technical specifications for IC755CSW07CDA

Manufacturer GE Fanuc Emerson

Product Type Operator Terminals

Product Line Quickpanel

Part Number IC755CSW07CDA

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Voltage 24 Volts DC

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Processor Freescale i.MX535 1GHz based on ARM Cortex A8

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Clock Speed 1GHz

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Display type Colored TFT Display

Serial Ports RS-232, Ethernet port

USB Ports USB Host: Two (2) USB 2.0 (Type-A) USB Device: USB 2.0 (Mini Type-B)

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Terminal memory 512 GB DDR2 SDRAM; 256 MB SLC NAND Flash; 512 KB SRAM

Temperature 0-55 degrees Celsius

Communication Interface One (1) Ethernet interface; One (1) RS485;

Communication ports One (1) Ethernet; One (1) RS232

Two (2) Ethernet; One (1) RS232 UART One (1) RS323 / RS485 Removable storage slot:

Operating System (OS) Windows CE Operating System version 7

1x SD/SDHC card slot Operating System

Power Supply 12 / 24 VDC

Windows Compact Embedded 7 Mounting

Status Indicators Tri-color LED (Amber/Green/Red); On-board Buzzer

Panel Mount; VESA 75 Supply Voltage

Functionalities HMI; PLC; Process controller; Data Historian; Gateway

24 VDC

Programming languages Ladder Diagram (LD); Function Block Diagram (FBD); Structured Text (ST); Instruction List (IL); Sequential Function Chart (SFC)

Bezel With manufacturer monogram

Description

The IC755CSW07CDA is a QuickPanel+ operator terminal from Emerson automation. This device is popularly termed as Human Machine Interface (HMI) or Operator Interface Terminal (OIT) by most personnel in the industry as this electronic device is primarily used to provide real-time monitoring and control capability of the connected machine or process through the embedded 7-inch widescreen display with resolution of 800 x 480 pixels and the multi-touch operator input interface. In addition, this terminal is also capable of functioning as a controller, machine gateway and data historian. The IC755CSW07CDA is an HMI device that supports panel mounting or VESA 75 installation. It requires an input supply voltage of +24VDC ±20% terminated to the provided 3-pin Phoenix type connector. This device also has a maximum power consumption of 15 Watts. It uses natural convection for device cooling and must be installed at an application area with temperature range of 0-55 Degrees Celsius and 85% relative humidity. The IC755CSW07CDA is pre-installed with an instance of Windows Compact Embedded 7 Operating System (OS). This operating system provides a user-friendly configuration environment and provides connectivity capabilities and terminal management features and tools. This HMI is installed with an Intel Freescale i.MX535 1 GHz ARM Cortex A8 processor with integrated memories that is comprised of 512 MB DDR2 SDRAM, 256 MB SLC NAND Flash and 512 KB SRAM. This HMI is provided with One (1) Ethernet I/P communication port and One (1) RS232 communication interfaces. It also has Three (3) USB ports and One (1) SD SDHC removable card slot for memory expansion.

The IC755CSW07CDA terminal is a 7-inch Quickpanel terminal manufactured by GE Fanuc. It is Quickpanel series terminal with a color TFT widescreen that can display clear data and information. The panel supports multi-touch control and is easy to use. It has a resolution of WVGA 800 x 480 pixels. It is powered with a 24 Volts DC supply. The terminal uses the GE monogram bezel. The terminal is designed with a NEMA 4X enclosure. It is equipped with a 512 MB DDR2 SDRAM and a 256 MB NAND flash memory for storage. The IC755CSW07CDA terminal features a single 10/100 Base T Ethernet port and a single RS-232 port for communication. Two USB ports are also present in the display terminal. The temperature should be maintained between 0 and 55 degrees Celsius for optimal operation. The operator interface terminal has been certified with the UL, CE, and EN standards. The GE Fanuc IC755CSW07CDA terminal is powered with an ARM A8 cortex processor with a speed of 1 GHz. It is able to process 2D and 3D graphics easily. The terminal is equipped with a NEON

SIMD media accelerator that helps to process graphics-intensive processes. Another Vector floating point coprocessor is also present to process the logical operations. The terminal uses the Windows 7 operating system for interfacing with the operators. The IC755CSW07CDA terminal has a maximum power consumption rating of 15 Watts. The natural convection method is used to maintain the temperature of the terminal. It can be stored in a temperature set between -10 and 60 degrees Celsius when not in use.